

ABSTRACT

A blue glass composition comprises a soda-lime-silica base and a colorant portion consisting essentially of about 0.4 to 0.65 weight percent total iron oxide, about 0.1 to 0.3 weight percent manganese oxide, and cobalt oxide in an amount effective to produce a cobalt concentration of about 0.0002 to 0.0013 weight percent (about 2 to 13 ppm). The glass is characterized by a ratio of ferrous oxide to total iron oxide between about 0.43 and 0.58. The glass composition exhibits a combination of high visible transmittance, high infrared absorption and enhanced blue coloration. This is attributed in large part to the combination of ferrous oxide and cobalt oxide and to the effect of manganese oxide in reducing iron sulfide formation and thereby avoiding amber coloration.